Theo Colborn <colborn@tds.net> 03/31/2011 04:11 PM To Elaine Lai

CC bcc

Subject Re: Fw: MSDS

I am so sorry for taking so long to get back to you. We had something we had to get out to DC ...

I think your list looks a lot more reasonable. We are beginning to get some fracking fluid, flowback, condensate,

produced water, and pit data .. that is going to take some time to get into an Excel.... This should begin to provide a

better picture of the waste and residuals. I am afraid it will not be ready for you on time.

I wonder if the law is not getting hung up on semantics and thus limiting regulatory power.

You will find on the pads in Colorado, two kinds of fluid holding tanks: some marked condensate and others produced

water. These hold formation water that comes with the gas that has been separated by heater treaters on the pad The

condensate is trucked to a unit where the valuable oils, paraffins, etc are separated off. And then that has to be

trucked to the evaporation pits or an injection site. The recovered water with less VOCs and oily substances, is trucked

directly to the pits. But throughout drilling, introduced water plus formation water returns to the surface just as it

does during fracking. Throughout both operations methane is coming up.

I watched a trucker unload produced water from a cluster of three produced water holding tanks that had 16 wells on the pad. She became totally invisible because of the amount of paraffin that blew off in a huge cloud that surrounded her throughout the 47 minute transfer to the truck. She works 12 hours a day on contract and has no health benefits. It's another world out there in the gas fields.

Are you aware of any location in the western half of the state where operators are using NPDES permits to get rid of this "water."?

By the way: We are very short of help and if you know someone looking for work ....an internship or 6 months or a year with the opportunity of joining our crew with a permanent position, tell them to get in touch with us. We will take qualified post grads and masters and PhD students...(most colleges will give credits toward an advanced degree working here. I have been doing this for years. And of course we would love to have a post doc. This is a nice place to live.

Regards, Theo

On 3/23/2011 11:20 AM, Lai.Elaine@epamail.epa.gov wrote: